



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/007,274
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Applicant: Heizaburo Kato
Group Art Unit: 3722
Examiner: Erica C. Cadugan
Title: Rotating Table Apparatus
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PRELIMINARY AMENDMENT

Sir:

Prior to examination of the present application, please consider the following.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 4 of this paper.

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

8-10 (Cancelled)

12-14 (Cancelled)

15. (New) A rotating table apparatus comprising:

a housing which has a gap portion;

a driven shaft supported by said housing and driven by an actuator;

a rotating table which is rotatingly driven by said driven shaft using a cam

and cam followers; and

oil that is for lubricating said cam and said cam followers and that is contained in said gap portion;

wherein said housing has an opposing surface which opposes an end surface of said rotating table,

wherein there is a space between said opposing surface and said end surface in a direction along a rotation axis of said rotating table,

wherein said space is linked with said gap portion and a portion of said oil flows from said gap portion into said space while said rotating table is stopped, and

wherein oscillation of said rotating table in the stopped position is promptly attenuated.

via use of cam

in Brit pat, could flow, depending on what portion of the cycle of the cam is you're in when the stoppage occurs

Serial No. 10/007,274

is basis in present there while stopped, but doesn't actually teach that the "flow" occurs while stopped

Supports that some of oil is present there while stopped, but doesn't actually teach that the "flow" occurs while stopped

N.M.

16. (New) A rotating table apparatus according to Claim 15, wherein said space is between about 0.005 mm and 0.2 mm.

17. (New) A rotating table apparatus according to claim 15, wherein said cam is a roller gear cam and said rotating table intermittently rotates.

18. (New) A rotating table apparatus according to claim 17, wherein a tool is provided in said rotating table.

19. (New) A rotating table apparatus according to Claim 17, wherein said rotating table is provided with a chuck for chucking a workpiece to process an object.

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6